## REMARKS/ARGUMENTS

Claims 1 through 26 are presently pending. In an office action mailed June 5, 2003 (Paper No. 13), claims 54 and 69-72 were objected to under 37 CFR 1.75(a) for noted informalities. Claim 56 was rejected under 35 U.S.C. 102(e) as being anticipated by Schemmel et al. (US 5,943,55a A) (*Schemmel*). Claims 50-52, 57, 58, 67 and 68 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sumie et a. (US 5,943,437) (*Sumie*) and *Schemmel*. Claims 53, 59, 60, 63 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie* and *Schemmel* and further in combination with Miyazaki (US 6,031,607) (*Miyazaki*). Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie* and *Schemmel* and further in combination with Brecher et al. (US 5,544,256) (*Brecher*). Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie* and *Schemmel* and further in combination with Michael (US 5,640,200) (*Michael*). Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie* and *Schemmel* and further in combination with Berezin et al. (US 5,539,752) (*Berezin*). Claims 61, 65 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie, Schemmel, Miyazaki,* and *Michael*. Claims 62, 66, 71, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie, Schemmel, Miyazaki,* and *Berezin*. These rejections are respectfully traversed.

Claims 50 through 72 have been cancelled without prejudice or disclaimer, and originally-filed claims 1 through 26 are herewith presented for examination. The rejection of these claims from the Office Action mailed 05/30/00 (paper no. 2) in the parent application of the present application (09/270,607) is herewith traversed.

### Rejection under 35 U.S.C. 112

Claims 20, 23, 25, and 26 were rejected under 35 U.S.C. 112, and have been amended to address the grounds for rejection stated in paper no. 2.

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## Rejections under 35 U.S.C. 102

Claims 1-3, 7-9, and 18-20 were rejected under 35 U.S.C. 102(e) as being anticipated by *Sumie*. This rejection is respectfully traversed.

*Sumie* fails to provide a basis for the rejection of claims 1-3, 7-9, and 18-20 under 35

5   U.S.C. 102(e) as it fails to disclose each element of the claimed invention. For example, claim 1 includes a "system for selection of a reference die image comprising: a die image comparator operable to create a difference image based upon a first die image and a second die image; and a difference image analysis system coupled to the die image comparator, the difference image analysis system operable to analyze the difference image and to determine whether the first die image and the

10   second die image may each be used as the reference die image." In contrast, *Sumie* states at col. 7, lines 50-57 that "the reference image data . . . to be stored in the image memory 3c of the image processor 3 may be generated by . . . picking up an image of a portion of the surface of the semiconductor where there is no defect." Properly construed, claim 1 would not cover the system disclosed in *Sumie*, as an operator must perform the disclosed action. This is evident from Figure

15   6 of *Sumie* which shows an image memory 3c that has no input – any image data stored in the image memory 3c can not be stored by processor 3 of *Sumie* but rather must be stored by an operator, who mentally determines whether the first die image and the second die image may each be used as the reference die image. Any construction of claim 1 that results in anticipation of the claim by *Sumie* is improper.

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Likewise, claim 7 includes a "system for inspecting dies comprising: a camera configured to obtain an image of one or more dies; and a reference die detection system coupled to the camera, the reference die detection system operable to determine whether a first die image and a second die image may be used as reference images." The system disclosed in *Sumie* would not infringe a proper

25   construction of claim 7, because *Sumie* requires an operator to mentally determine whether a first die image and a second die image can be used as reference images. Any construction of claim 7 that results in anticipation of the claim by *Sumie* is improper.

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Claim 18, as amended, includes a "method for selecting a reference die image comprising: subtracting a first die image from a second die image to create a difference image; determining whether the difference image contains unacceptable data; and storing the first die image and the second die image as reference die images without operator input if the difference image does not contain unacceptable data." The system disclosed in *Sumie* would not infringe a proper construction of claim 18, because *Sumie* requires an operator to mentally determine whether a first die image and a second die image can be used as reference images. Any construction of claim 18 that results in anticipation of the claim by *Sumie* is improper.

Claims 2 and 3 depend from claim 1, claims 8 and 9 depend from claim 7, and claims 19 and 20 depend from claim 18, and are allowable at least for the reasons that they depend from an allowable base claim and add limitations not disclosed in the prior art.

## Rejections under 35 U.S.C. 103

Claims 1-3, 5, 7-9, 18-20, 22 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Leonard et al. (US 4,928,313) (*Leonard*) in view of *Sumie*. Claim 26 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie* in view of Khalaj et al. (US 5,513,275) (*Khalaj*). Claims 6, 24 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie* in view of *Berezin*. Claims 6, 24 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Sumie* in view of *Brecher*.

As described above, these rejections under 35 U.S.C. 103 are improper because they each include a claim construction that would result in the infringement of the claims by *Sumie* in combination with other art. *Sumie* and the other cited art entirely fails to disclose any systems or methods for determining whether die images can be used as reference images without operator input. For example, it is admitted by the Examiner that *Leonard* fails to disclose how a circuit is determined to be "good," that *Khalaj* is only cited for disclosing "averaging among all of the blocks in an image," that *Berezin* is only cited for disclosing providing a warning when defect density exceeds preselected parameters, and that *Brecher* is only cited for disclosing the use of

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histogram analysis for detection of defects. To the extent that these claims are construed to cover the system disclosed in *Sumie* as covering determining whether die images can be used as reference images without operator input, either alone or in combination with the other cited art, such construction is improper.

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## CONCLUSION

In view of the foregoing remarks and for various other reasons readily apparent, Applicants submit that all of the claims now present are allowable, and withdrawal of the rejections and a Notice of Allowance are courteously solicited.

5      If any impediment to the allowance of the claims remains after consideration of this amendment, and such impediment could be alleviated during a telephone interview, the Examiner is invited to telephone the undersigned at (214) 969-4669 so that such issues may be resolved as expeditiously as possible.

No additional fee is believed to be required with this response. If any applicable fee or refund has been overlooked, the Commissioner is hereby authorized to charge any fee or credit any refund to the deposit account of Akin, Gump, Strauss, Hauer & Feld, L.L.P., No. 01-0657.

Respectfully Submitted,
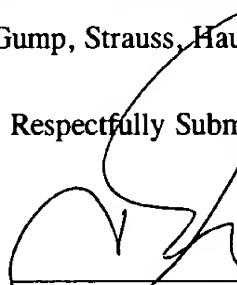
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